



ORYX® Silicone FR

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ORYX®, passion for passive fire protection

ORYX® is the specialist in passive fire protection for buildings. Thanks to our passionate expertise and extensive product range, ORYX® provides solutions for countless applications in the field of fire-resistant load-bearing structures, fire-resistant compartments and the creation of fire-resistant penetrations. All products and applications have a CE-label and were tested in line with European standards and can therefore be used right across Europe.

Our specialists are always ready to provide you with technical advice and support.

PRODUCT DESCRIPTION

ORYX® Silicone FR is a neutrally curing fire-resistant sealant for creating fire-resistant seals in non-moving joints and seams around small utilities penetrations.

CHARACTERISTICS

- CE label for fire-resistant applications
- Tested constructions to fire-resistance performance EI 240 (EN 13501-2)
- Tested in countless constructions of linear joints and utilities penetrations in line with the European standards EN 1366-4 & EN 1366-3.
- Effective adhesion to the most diverse building materials, incl. porous surfaces without primer
- Very flexible, resists expansion to about 7.5%
- Very durable, both for indoor and outdoor use
- Can be applied horizontally and vertically
- Non-toxic
- Generates very little smoke in the event of fire
- Halogen-free
- Fungicidal
- Dust-free after 30 minutes, drying time at a thickness of 4 mm about 24 hours
- For outdoor application under the influence of weather conditions from -20°C to +70°C

APPLICATIONS

- Sealing of fire-resistant joints between floors and walls up to 40 mm wide and with backfiller based on PE or mineral wool
- Sealing of joints around fire-resistant lightweight partition walls
- Sealing around steel pipes and small utilities penetrations
- Sealing of joints around doorframes
- Filling of openings up to 50 mm
- Installation of fire-resistant grilles and intumescent pipe seals



FITTING GUIDELINES

- Apply with sealant gun
- Surface must be dry, clean and dust-free
- Can be used and stored between +5°C and +40°C
- Smooth off joints within 8 minutes of applying
- We recommend a joint width/depth ratio of 1:2
- Fill up joints adequately
- Joint width max. 40 mm
- Where necessary, insert backfiller using mineral wool or polyethylene to achieve the required joint depth

PACKAGING AND STORAGE

- In 310 ml tubes
- Keep dry and frost-free at temperatures between +3°C and +30°C

LIMITATIONS

Do not use in permanent contact with water or food, or for structural glazing. It is the user's responsibility to understand the usage guidelines. We recommend first testing adhesion, as a primer may be necessary in some cases and for certain surfaces.

SAFETY REQUIREMENTS

Wear appropriate safety gear. Do not inhale vapours and use in well-ventilated areas.

Avoid contact with skin and eyes. In case of contact with eyes, rinse thoroughly with water and seek medical advice.

Wash hands after use with water and soap. Keep out of the reach of children. Do not swallow. Product contains fungicide. For further information, please refer to the Safety Data Sheet.

DISCLAIMER

The content of this brochure has been compiled with the greatest possible care and is only intended for information purposes. The information contained herein does not constitute a partial or full guarantee or proposal for which we are liable. We reserve the right to change or alter product specifications.

All information about our products and applications can be found at www.oryx.pro



FITTING INSTRUCTIONS

ANNEX A, FIRE-RESISTANCE FOR PENETRATIONS

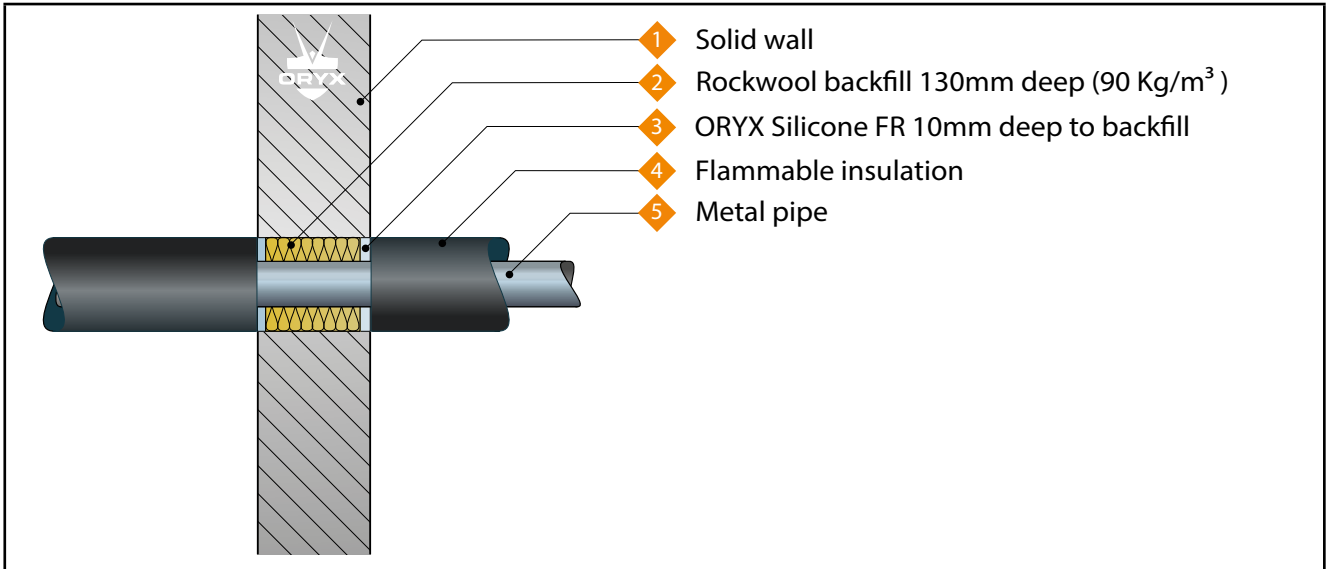
Characteristics of the product and references to the assessment methods

Product type: Sealant		Intended use: Penetration seal	
Minimum construction requirements	Basic requirements	Characteristics	
BWR 1 Mechanical resistance and stability			
-	None	Not relevant	
BWR 2 Safety in case of fire			
EN 13501-1	Reaction to fire	No characteristic specified	
EN 13501-2	Fire-resistance	Annex A (penetrations) Annex B (joints)	
BWR 3 Hygiene, health and environment			
EN 1026:2000	Air permeability (material characteristic)	No characteristic specified	
ETAG 026-2, Annex C	Water permeability (material characteristic)	No characteristic specified	
Manufacturer's declaration	Release of hazardous substances	Usage category: IA1, S/W3 Manufacturer's declaration	
BWR 4 Safety use			
EOTA TR 001:2003	Mechanical resistance and stability	No characteristic specified	
EOTA TR 001:2003	Resistance against denting/movement	No characteristic specified	
EOTA TR 001:2003	Gluing	No characteristic specified	
BWR 5 Noise protection			
EN 10140-2/ EN ISO 717-1	Airborne noise insulation	No characteristic specified	
BWR 6 Energy efficiency and thermal insulation			
EN 12664, EN 12667 or EN 12939	Thermal characteristics	No characteristic specified	
EN ISO 12572 EN 12086	Water-vapour permeability	No characteristic specified	
General aspects relating to use			
EOTA TR 024:2009, clause 3.1.11 & 3.1.12	Durability and maintenance	X	
BWR 7 Sustainable use of natural resources			
-	-	No characteristic specified	

Product(s)	Intended use	Level(s) or class(es)	System
Fire-resistant sealing material	For fire compartmentalisation and/or fire safety or fire protection	All	1

A.1 Solid wall constructions with a wall thickness of at least 150 mm

A.1.1 Penetration seal with metal pipe fitted with ‘continuous interrupted’ (CI) or at least 500 mm ‘local interrupted’ (LI) flammable insulation

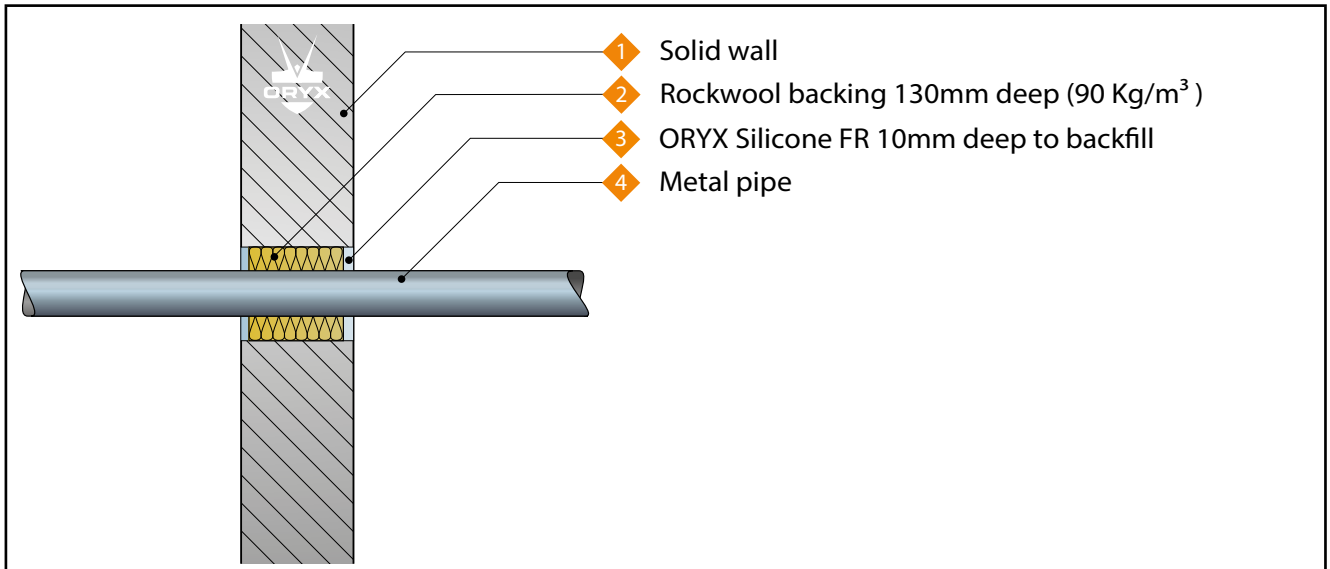


A.1.1.1

ORYX® Silicone FR penetration seal in solid walls of 150 mm thick (min.)				
Aperture (mm)	Composition of seal	Penetration(s)	Position of tubes	Classification
80 diameter	10 mm deep ORYX® Silicone FR flat on both sides of the wall, backing 130 mm deep rockwool (90 kg/m ³)	Single steel pipe 40 mm diameter and 3.2-14.2 mm wall thickness, insulated with 25 mm thick ‘class B*’ Nitrile rubber insulation	Central	EI 240 C/U
		Single copper pipe 38 mm diameter and 1.2-14.2 mm wall thickness, insulated with 25 mm thick ‘class B*’ Nitrile rubber insulation		EI 120 C/U

*Classified in line with EN 13501-1

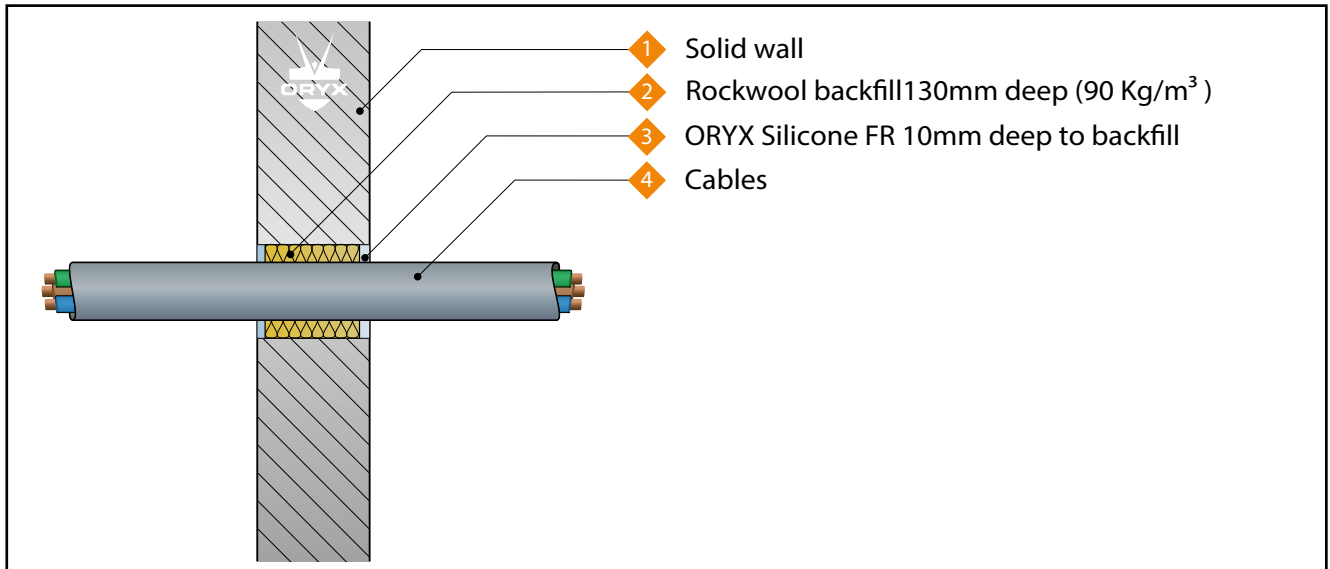
A.1.2 Penetration with uninsulated pipe



A.1.2.1

ORYX® Silicone FR penetration seal in solid walls of 150 mm thick (min.)				
Aperture (mm)	Composition of seal	Penetration(s)	Position of tubes	Classification
80 diameter	10 mm deep ORYX® Silicone FR flat on both sides of the wall, backing 130 mm deep rockwool (90 kg/m³)	Single steel pipe of 40 mm diameter and 3.2-14.2 mm wall thickness	Central	E 240 C/U EI 120 C/U
		Single copper pipe 38 mm diameter and 1.2-14.2 mm		E 120 C/U

A.1.3 Penetration with cables



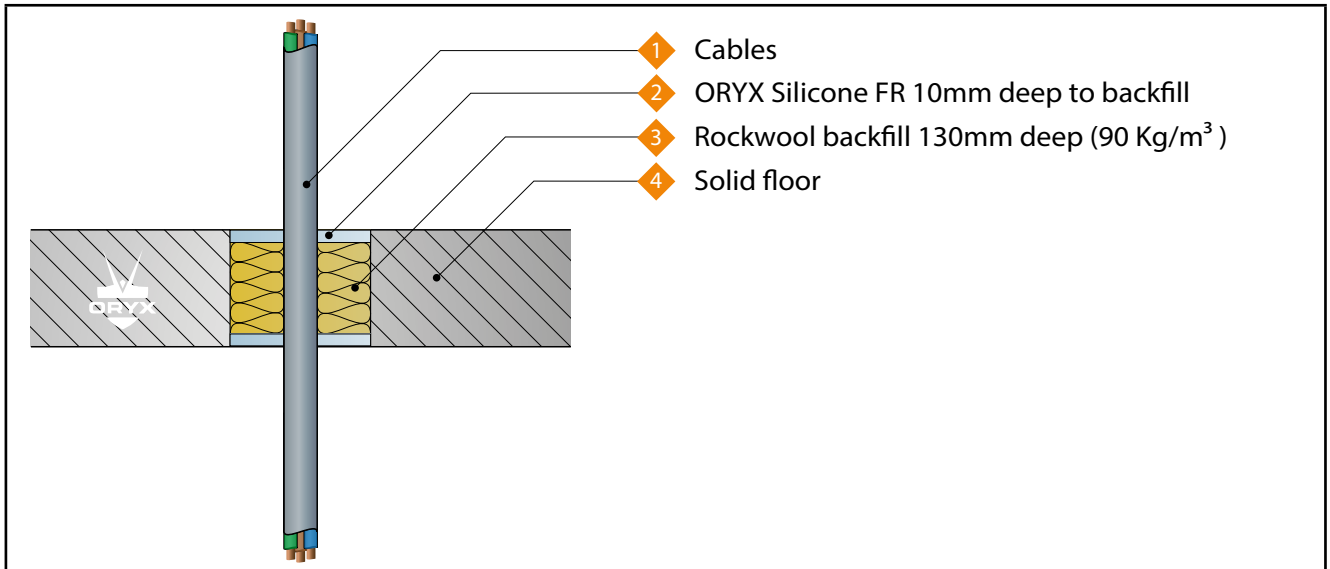
A.1.3.1

ORYX® Acrylic FR penetration seal in solid walls of 150 mm thick (min.)				
Aperture (mm)	Composition of seal	Penetration(s)	Position of tubes	Classification
60 diameter	10 mm deep ORYX® Silicone FR flat on both sides of the wall, backing 130 mm deep rockwool (90 kg/m³)	Set of 4x 'A3' cables + 1x 'C3' cable	Central	EI 240
		Single 'E' cable		

Type A3 cable = 5 x 1.5 mm² core HD604.5 electrical cable with XLPE insulation, EVA sleeve and 13 mm diameter
 Type C3 cable = 4 x 95 mm² core HD603.3 electrical cable with PVC insulation, PVC sleeve and 42 mm diameter
 Type E cable = 1 x 185 mm² core HD603.3 electrical cable with PVC insulation, PVC sleeve and 23-27 diameter

A.2 Solid floor constructions with a thickness of at least 150 mm

A.2.1 Penetration seal with cables



A.2.1.1

ORYX® Silicone FR penetration seal in solid floors of 150 mm thick (min.)				
Aperture (mm)	Composition of seal	Penetration(s)	Position of tubes	Classification
80 diameter	10 mm deep ORYX® Acrylic FR flat on both sides of the wall, backing 130 mm deep rockwool (90 kg/m³)	Single 'E' cable	Central	E 240 EI 45

Type E cable = 1 x 185 mm² core HD603.3 electrical cable with PVC insulation, PVC sleeve and 23-27 mm diameter

ANNEX B, FIRE-RESISTANCE OF JOINTS

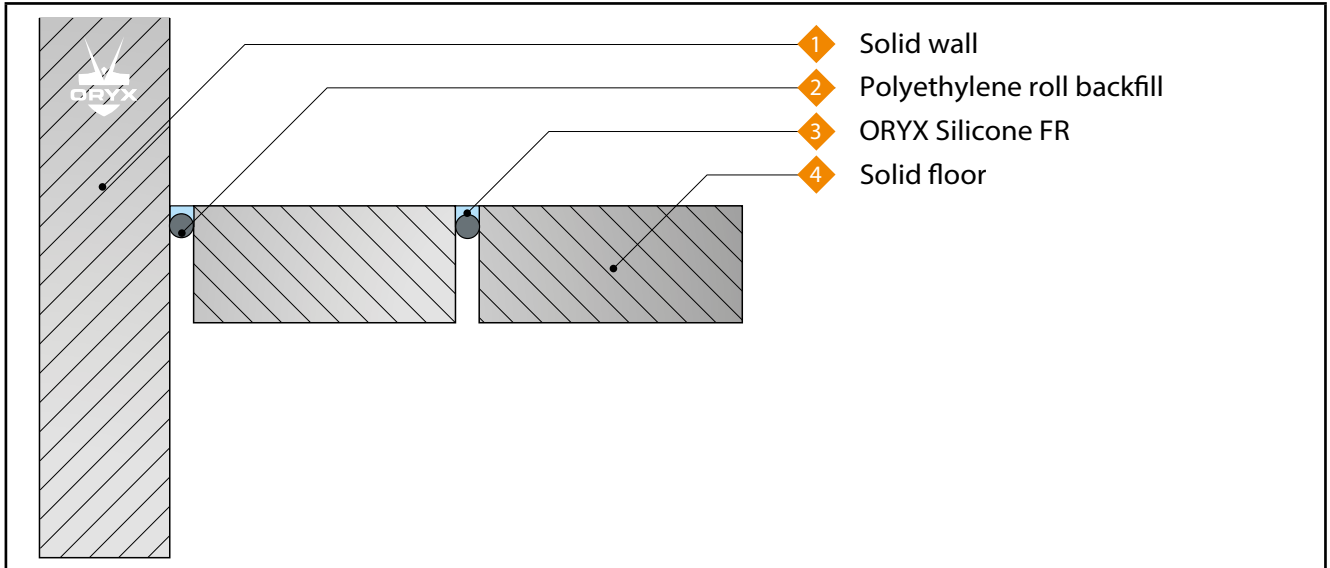
Characteristics of the product and references to the assessment methods

Product type: Sealant		Intended use: Penetration seal	
Minimum construction requirements	Basic requirements	Characteristics	
BWR 1 Mechanical resistance and stability			
-	None	Not relevant	
BWR 2 Safety in case of fire			
EN 13501-1	Reaction to fire	No characteristic specified	
EN 13501-2	Fire-resistance	Annex B	
BWR 3 Hygiene, health and environment			
EN 1026:2000	Air permeability (material characteristic)	No characteristic specified	
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BWR 5 Noise protection			
EN 10140-2/ EN ISO 717-1	Airborne noise insulation	No characteristic specified	
BWR 6 Energy efficiency and thermal insulation			
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General aspects relating to use			
EOTA TR 024:2009, clause 3.1.11 & 3.1.12	Durability and maintenance	X	
BWR 7 Sustainable use of natural resources			
-	-	No characteristic specified	

Product(s)	Intended use	Level(s) or class(es)	System
Fire-resistant sealing material	For fire compartmentalisation and/or fire safety or fire protection	All	1

B.1 Solid wall constructions with a wall thickness of at least 150 mm

B.1.1 Linear joint or seam, vertically oriented with the seal on one side (side not important)



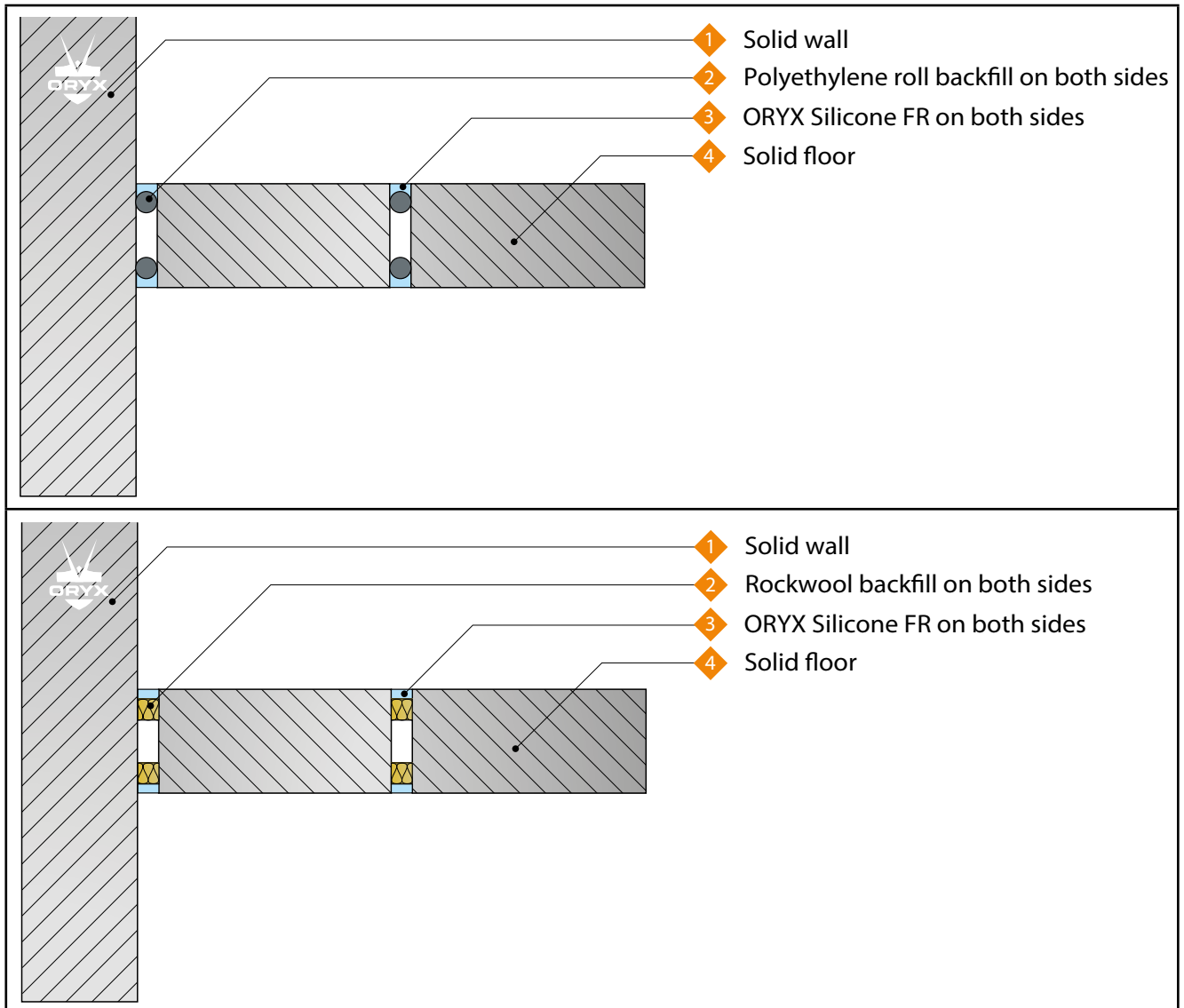
B.1.1.1

ORYX® Silicone FR Linear joints in solid walls of 150 mm thick (min.) – Sealing of one side (side not important)			
Substrate	Depth (mm)	Backing	Classification
Stony/ Concrete	10 min.	Polyethylene roll	E 240 – V – X – F – W 00 to 15 EI 180 – V – X – F – W 00 to 15
	15 min.		E 240 – V – X – F – W 00 to 25 EI 120 – V – X – F – W 00 to 25

Explanation of classification:

- H: Horizontal support construction
- V: Vertical support construction, vertical seam
- X: No movement of the joint
- F: Type joint 'Field'
- W: Joint-width range (in mm)

B.1.2 Linear joint or seam, vertically oriented with the seal on both sides





B.1.2.1

ORYX® Silicone FR Linear joints in solid walls of 150 mm thick (min.) – Sealing of both sides of the wall			
Substrate	Depth (mm)	Backing	Classification
Stony/ Concrete	2:1 width-depth ratio	Polyethylene roll	EI 240 – V – X – F – W 20 to 40
	25 min.	25 mm rockwool 90 kg/m ³	EI 240 – V – X – F – W 00 to 40
	10 min.	15 mm rockwool 90 kg/m ³	EI 240 – V – X – F – W 00 to 15

Explanation of classification:

H: Horizontal support construction

V: Vertical support construction, vertical seam

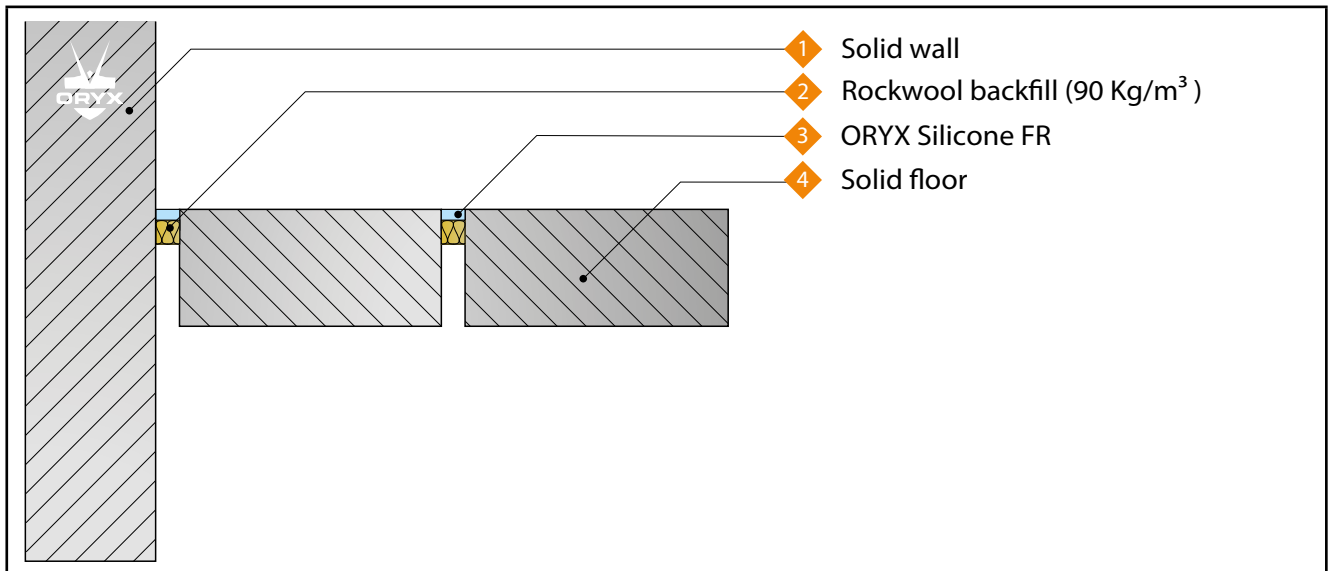
X: No movement of the joint

F: Type joint 'Field'

W: Joint-width range (in mm)

B.2 Solid floor constructions with a thickness of at least 150 mm

B.2.1 Linear joint or seam, between floor components or between floors and walls, with the seal on the upper surface of the floor



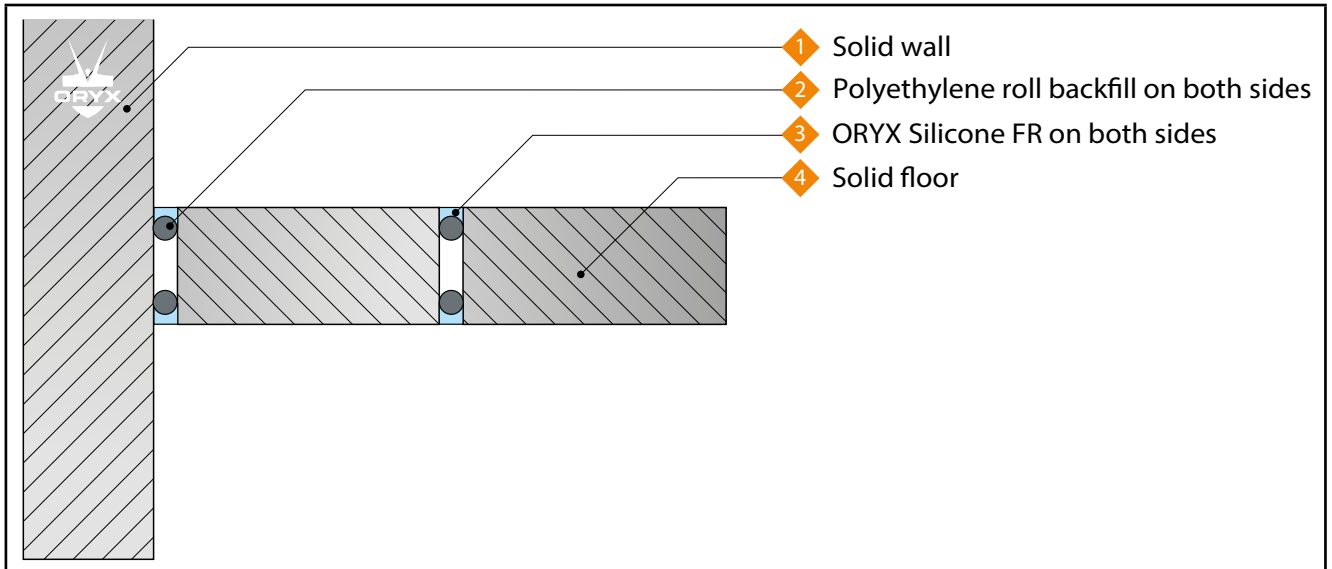
B.2.1.1

ORYX® Silicone FR Linear joints in solid floors of 150 mm thick (min.) – Sealing only on the upper surface of the floor			
Substrate	Depth (mm)	Backing	Classification
Stony/ Concrete	2:1 width-depth ratio	25 mm rockwool 90 kg/m ³	E 240 – H – X – F – W 20 to 40 EI 120 – H – X – F – W 20 to 40
	10 min.		E 240 – H – X – F – W 00 to 20 EI 180 – H – X – F – W 00 to 20

Explanation of classification:

- H: Horizontal support construction
- V: Vertical support construction, vertical seam
- X: No movement of the joint
- F: Type joint 'Field'
- W: Joint-width range (in mm)

B.2.2 Linear joint or seam, between floor components or floors and walls, with the seal on both sides



B.2.2.1

ORYX® Silicone FR Linear joints in solid floors of 150 mm thick (min.) – Sealing only on both sides of the floor			
Substrate	Depth (mm)	Backing	Classification
Stony/ Concrete	2:1 width-depth ratio	Polyethylene roll	EI 180 – H – X – F – W 20 to 40
	20 min.		EI 240 – H – X – F – W 00 to 40

Explanation of classification:

- H: Horizontal support construction
- V: Vertical support construction, vertical seam
- X: No movement of the joint
- F: Type joint 'Field'
- W: Joint-width range (in mm)